10/622,419

APR 23 2008

## Amendments to the Claims:

17167061428

This listing of the claims will replace all prior versions, and listings, of claims in this application:

## Listing of the Claims:

- 1-4. (Cancelled)
- (Amended) A polymerization temperature test element for a polymerization device for 5. polymerizing a dental restoration product, the polymerization device having an energy source for irradiating the dental restoration product with one or both of light radiation and thermal radiation to effect polymerization of the dental restoration product; comprising:
  - a howl shaped base element (20) having a circumferential wall (28) and a floor surface (26);
  - a centrally located receipt region (12) carried by the base element (20) and extending beyond the floor surface, the receipt region being operable to receive a dental restoration product to be polymerized in response to the application of energy from the irradiating source, the base element (20) and the receipt region (12) being configured so as to be subjected to the respective light and thermal radiation emitted by the energy source to effect polymerization of the dental restoration product received by the receipt region (12), the receipt region being configured in the manner of a centrally disposed hub; and
  - irreversible temperature indicating means carried by the inner side of the circumferential wall of the base element and spaced away from the receipt region a distance sufficiently great so that the temperature indicating means cannot be in contact with the dental restoration product to be polymerized, the

temperature indicating means indicating that at least one discrete temperature has been reached during irradiation of the dental restoration product, wherein the base element (20) includes a floor surface (26), and the receipt region is disposed centrally of the base element (20) and extends beyond the floor surface.

## 6-8 (Cancelled)

- 9. (Amended) A polymerization temperature test element for a polymerization device for polymerizing a dental restoration product, the polymerization device having an energy source for irradiating the dental restoration product with one or both of light radiation and thermal radiation to effect polymerization of the dental restoration product; comprising:
  - a bowl shaped base element (20) having a circumferential wall (28);
  - a centrally located receipt region (12) carried by the base element (20) and operable to receive a dental restoration product to be polymerized in response to the application of energy from the irradiating source, the base element (20) and the receipt region (12) being configured so as to be subjected to the respective light and thermal radiation emitted by the energy source to effect polymerization of the dental restoration product received by the receipt region (12), the receipt region being configured in the manner of a centrally disposed short cylinder; and

irreversible temperature indicating means carried by the inner side of the circumferential wall of the base element and spaced away from the receipt

region a distance sufficiently great so that the temperature indicating means cannot be in contact with the dental restoration product to be polymerized, the temperature indicating means indicating that at least one discrete temperature has been reached during irradiation of the dental restoration product wherein the base element (20) includes at least one temperature indicating means (32, 34) having a color indicia, the color indicia of each color-temperature indicator (32, 34) having the characteristic that at least one of its brightness and its original color changes in an irreversible manner upon reaching a predetermined release temperature unique to the respective color-temperature indicator (32, 34).

## 10-19. (Cancelled)

- 20. (Amended) A polymerization temperature test element for use with a polymerization device having an energy source for irradiating a dental restoration product; the polymerization test element comprising:
  - a bowl shaped base element having a circumferential wall and [[with]] a centrally located receipt region configured in the manner of a centrally disposed hub, the receipt region [[for]] receiving a dental restoration product which is to be irradiated from an energy source to effect polymerization of the dental restoration product, wherein the base element includes a floor surface between the circumferential wall and the centrally disposed hub, and wherein the receipt region is disposed centrally and extends beyond the floor surface; and

peripheral temperature indicating means supported by the inner side of the circumferential wall of the base element, the temperature indicating means being capable of indicating when at least one discrete temperature has been reached during the irradiation of the dental restoration product, the temperature indicating means being irreversible.

- 21. (Amended) A polymerizable temperature test element for a polymerization device, in particular in the field of dental restoration, the device having an energy source for irradiating a mass, a bowl shaped base element (20) with a circumferential wall (28) and a support strip (30) which is mounted on the inner side of the circumferential wall (28) and provided with color temperature indicators (32, 34) which change colors at discrete temperatures, characterized in that:
- the base element (20) has a central region (12) in the form of an elevated hub in the shape of a short cylinder to be filled with the mass to be irradiated and that the central region (12) is spaced away from the support strip (30) in a sufficiently distance, a distance sufficient that the temperature indicators (32,34) can not be in contact with the mass to be irradiated and that the temperature indicators (32,34) change the colors irreversible.
- 22. (New) A test element for a polymerization device in the field of dental restoration, the device having an energy source, the test element (10) comprises a base body (20) having a receipt region (12) to be filled with the material to be hardened by the light radiation and/or thermal radiation and to be subjected to the radiation emitted by the energy source of the polymerization device, characterized in that

the base body (20) comprises at least one temperature indicator (32,34) for measuring the hardening border of the material to be polymerized in the receipt region via the change of color of the indicator, and

the base body (20) at least partially consist of a material not being permeable for the light, and the part of the base body (20) being nonpermeable for light is arranged between the energy source of the polymerization device and the color temperature indicators (32, 34).